

IN THE SPECIFICATION:

Please replace the paragraph beginning at line 4 on page 10 with the following paragraph.

The vector \mathbf{y} of linear phase estimates is a vector of noisy data that can be represented as a vector $\mathbf{u} = [u(0), u(1), \dots, u(N-1)]^T$ plus a noise vector $\mathbf{t} = [t(0), t(1), \dots, t(N-1)]^T$ (i.e. $\mathbf{y} = \mathbf{u} + \mathbf{t}$). A component $u(n)$ can be represented by the linear equation dependent of the pair (θ_0, f_0) :

$u(n) = \theta_0 + n * T_s * 360 * f_0$ where T_s is the sampling period (in seconds), θ_0 is in degrees, and f_0 is the carrier ~~offset~~ frequency offset in Hertz.

Please replace the paragraph beginning at line 30 on page 17 with the following paragraph.

Figure 6 illustrates an exemplary curve obtained by applying the curve fitting algorithm to a sequence of phase values $\theta_3(n)$. As shown in Figure 6, ten input phase values are used to predict the eleventh phase value which is expressed linearly as a function of the carrier ~~frequency~~ phase offset estimate $\hat{\theta}_0 = 34^\circ$ and the carrier ~~phase~~ frequency offset estimate $\hat{f}_0 = 1/(8T_s)$ as previously described. The noisy phase data represent the input phase values, the LS and RLS curve-fit represents the straight line approximation of the noisy data, and the LS and RLS predictor is the predicted value obtained by using the RLS method.